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(54) Title: OPTICAL PULSE LASERS

(57) **Abstract:** The present invention provides pulsed lasers which employ carbon nanotubes, particularly layers of carbon nanotubes, as saturable absorbers, mode lockers or for Q-switching elements. The present invention also provides methods and materials for mode-locking and Q-switching of lasers in which carbon nanotubes are employed as non-linear optical materials and/or saturable absorbers which facilitate mode-locking and/or Q-switching. The invention further provides mode locker and Q-switching elements or devices which comprise one or more layers containing carbon nanotubes which layer or layers function for mode locking and/or Q-switching.

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